

Claims 1, 2, 3, 4, 5, 6, 8, 9, 14, 15, 17, 21, 23, 25, 26, and 27 stand rejected under 35.U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,330,356 (Sundareswaran et al.). Applicants respectfully traverse this rejection for the following reasons.

As recited in independent Claim 1, the present invention includes, *inter alia*, the feature of an input unit adapted to input a user's instruction indicating a match between a position and/or orientation of indices on a real image and a position and/or orientation of indices on a virtual image. The invention of Claim 1 further comprises an acquisition unit adapted to acquire output values from a position and/or orientation sensor according to the input by the input unit, and an operation unit adapted to derive calibration information based on the output values acquired by the acquisition unit and a predetermined position and/or orientation. In other words, with the invention of Claim 1, a user inputs an instruction with an input unit to indicate that indices (e.g., markers) on a real image and a virtual image or overlaid, and calibration information is derived based on sensor outputs at the time of the user's instruction. By way of further explanation, and without limiting the claimed invention to any particular embodiment, the Examiner is referred to Figs. 7A-7C, for example.

Applicants submit that the cited art fails to disclose or suggest at least the above-mentioned features recited in Claim 1. Sundareswaran, et al. discloses tracking features on an image and calculating a viewpoint position of a camera based on a tracking result using a "visual servoing" method.. As shown in Fig. 7, according to that patent camera parameters are calculated automatically based on this method, which uses loop processing so as to minimize a difference between a measured marker position (Sr)

detected from an image and a predicted marker position (S) obtained from a CAD model based on a predicted viewpoint position of the camera. Fig. 9 shows a flow chart of the loop processing. Thus, in the cited patent, no user's instruction is used to indicate a match between a position and/or orientation of indices on a real image and indices on a virtual image. Therefore, Applicants submit, the cited patent fails to disclose or suggest at least the feature of an input unit adapted to input a user's instruction as recited in Claim 1.


The Office Action asserts that Col. 4, lines 5-36 of the cited patent discloses all arrangements of the claimed invention. However, that portion of the cited patent merely discloses the "visual servoing" method. As discussed above, that method does not utilize an input user's instruction to indicate a match between indices. The Office Action further asserts that the claimed input unit corresponds to unit 30 in Fig. 1 of the cited patent. However, unit 30 disclosed in Sundareswaran, et al. does not accept a user's instruction indicating a match between a position and/or orientation of indices on a real image and of indices on a virtual image. Therefore, the claimed input unit cannot read on unit 30.

For the foregoing reasons, Applicants submit that Claim 1 is patentable over the cited art. Independent Claim 21 recites similar features and is believed patentable for similar reasons. The dependent claims are believed patentable for at least the same reasons as the independent claims, as well as for the additional features they recite.

In view of the foregoing, Applicants submit that this application is in condition for allowance. Favorable reconsideration, withdrawal of the rejection set forth in the above-mentioned final Office Action, and an early Notice of Allowance are requested.

Applicants' undersigned attorney may be reached in our Washington, DC office by telephone at (202) 530-1010. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Brian L. Klock", is written over a horizontal line.

Attorney for Applicants  
Brian L. Klock  
Registration No. 36,570

FITZPATRICK, CELLA, HARPER & SCINTO  
30 Rockefeller Plaza  
New York, New York 10112-3801  
Facsimile: (212) 218-2200  
BLK/lmj

DC\_MAIN 155349v1